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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,568	10/05/2001	Brad K. Fayette	064731.0187	5350

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EXAMINER	
DIVECHA, KAMAL B	
ART UNIT	**PAPER NUMBER**
2151	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/09/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/972,568	FAYETTE, BRAD K.	
	Examiner	Art Unit	
	KAMAL B. DIVECHA	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-5, 11-17, 20-22 are pending in this application.

Claims 6-10 and 18-19 remain cancelled in this application.

Response to Arguments

Applicant's arguments filed January 16, 2007 have been fully considered but they are not persuasive.

In response filed, applicant argues in substance that:

a. Neither Denny or Birdwell disclose "wherein said legacy protocol defines a fixed legacy header length." (Remarks, page 14).

In response to argument [a], Examiner respectfully disagrees.

Denny, in its clear context, explicitly discloses a legacy protocol, which defines a fixed legacy header length.

For example:

At column 5, lines 27-32, in association with figure 2, Denny clearly indicates a fixed prefix, i.e. a fixed header of a data message.

In addition to that, Denny also teaches that the extended prefix may not be present (See col. 7 L35-43), in which case the fixed header will be the fixed prefix.

Furthermore, Denny clearly discloses "...Consequently, a message having a prefix that is of the fixed specified length for processing in local IMS will in many cases be incompatible for processing by remote IMSs..." (See col. 1 L44-59) and the fact that Denny ensures the compatibility, i.e. interoperability, of transaction, i.e. messages, processing for all IMSs (See col.

1 L60 to col. 2 L2), is further evident that Denny does teach and disclose a legacy protocol that defines a fixed legacy header length.

Therefore, applicant argument directed towards the distinction between the prior art and the claimed invention, based on the feature above is considered non-persuasive.

b. Neither Denny or Birdwell disclose "allocating a memory portion from the computer memory, said memory portion having depth corresponding to said fixed legacy header length." (Remarks, page 14).

In response to argument [b], Examiner respectfully disagrees.

Denny, in its clear context, expressly discloses allocating a memory portion from the computer memory, obviously it has to be from the computer that receives the message, having a depth corresponding to the said fixed legacy header length.

For example:

At column 2, lines 47-60, Denny discloses "additionally, the message receiving means includes a means for determining the size of the prefix, i.e. header, and the message receiving means establishes the capacity of the input data buffer to be at least equal to the size of the prefix".

In other words, the receiving means allocates memory portion from the computer memory having the depth at least equal to the size of the prefix, i.e. having a depth corresponding to fixed legacy header length or size.

Therefore, applicant argument directed towards the distinction between the prior art and the claimed invention, based on the feature above is considered non-persuasive.

c. Denny discloses that the memory is increased to accommodate the message. For this reason, there is simply not a motivation to combine a teaching from any reference that discloses truncating a message that is greater than a memory depth with the teachings of Denny (Remarks, page 14).

In response to argument [c], Examiner respectfully disagrees.

Presently disclosed and/or claimed invention solves the incompatibility problems, i.e. interoperability, faced by the communication networks. That is, in an event where different systems may be running different versions of the software (See applicant specification, page 2 [0004] to page 3 [0006]), the invention enables the receiving system to interpret and/or process the message accordingly, such as by truncating the header.

Denny, from the similar problem solving area ensures compatibility, i.e. interoperability, of transaction processing for all computer systems (col. 1 L60 to col. 2 L24, col. 2 L26 to col. 3 L67).

However, Denny's process is based on allocating more memory in response to comparison of the fixed header length with the buffer capacity (see fig. 3 and fig. 4).

The Question is why can't compression/truncation be considered as an alternative in solving the compatibility problem as indicated above?

Therefore, the motivation fully exists for modifying Denny in view of any other reference that discloses truncation, in this case, Birdwell, in order to remove the un-necessary or unwanted parameters associated with the message in interpreting the message in correspondence with the receiving system's configuration.

In this case, the motivation is the fact that the modification would have ensured compatibility between different computing systems (see the detailed rejection below). The fact that Denny takes an approach of allocating more memory, in solving the compatibility problem, does not necessarily mean the motivation does not exist.

For the at least these reasons, applicant arguments is considered not persuasive.

d. In any case, Birdwell does not disclose the "truncating" limitation (Remarks, page 14-15).

In response to argument [d], Examiner respectfully disagrees.

Applicant originally filed specification discloses:

"[0030]...Since the memory 206 has been allocated only sufficient storage space according to the legacy protocol 208, additional parameters of the upgraded header can be stripped off or ignored and the header becomes truncated or flattened..."

In other words, applicant specification is evidenced to interpret "truncating" as the process of removing, stripping or ignoring certain type of parameters of a header of a message, thereby reducing the length of the message header.

Birdwell, explicitly discloses the process wherein "Compression is achieved by removing the non-changing header fields from the header (col. 2 L19-21, L54-60), thereby reducing the length of the message.

That is, Birdwell discloses the process of truncation/compression by removing the fields of the header whether it be non-changing fields or whatever portion of a header that does not fit in a memory space.

For the at least this reason, applicant argument is considered not persuasive.

On page 15 of remarks, applicant states "applicant wishes to make clear that neither of these phrases are recited in the claims. Thus, applicant is unsure why they are included in the Examiner's argument".

In response to the applicant's unsureness, the presentation of limitations such as "retaining the unrecognized fields associated with the header portion and dynamically allocating the memory space or stack" in the rejection was intended to present a more meaningful rejection to the applicant, in light of the applicants specification. For example: see [0031] on page 12 of applicant specification that discloses the preservation or retention of the recognized fields only by the receiving machine.

Accordingly, THE REJECTION IS MAINTAINED.

Claim Rejections - 35 USC § 101

The 35 U.S.C. 101 rejection presented in the previous office action has been withdrawn in light of the amendments (See response filed 1/16/07).

Specification

The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The test to be applied under the written description portion of 35 U.S.C. § 112, first paragraph, is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of later claimed subject matter. Vas-Cat, Inc. v. Mahurkar, 935 F. 2d 1555, 1565, 19 USPQ2d 111, 1118 (Fed. Cir. 1991), reh'rg denied (Fed. Cir. July 8, 1991) and reh'rg, en banc, denied (Fed. Cir. July 29, 1991).

The applicants have failed to provide an enabling disclosure in the detailed description of the embodiment. The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to support the subject matter set forth in these claims, i.e. lack of written description. See MPEP § 2163.

Claim 1 recites:

> A method for processing a header portion of a message, comprising:
> establishing a legacy protocol, wherein said legacy protocol defines at least one legacy parameter for a header portion of a message, and wherein said legacy protocol defines a fixed legacy header length;
> receiving an inbound message having a header portion;
> allocating a memory portion from the computer memory, said memory portion having a depth corresponding to said fixed legacy header length;
> pushing said header portion of said inbound message onto said memory portion thereby forming a received header, wherein the header portion is pushed onto said memory portion such that said header portion is truncated to form the received header when a length of said header portion is greater than said depth of said memory portion corresponding to said fixed legacy header length and wherein said header portion is not truncated when a length of said header portion is not greater than said depth of said memory portion, such truncation causing any header parameters associated with an upgraded protocol to be removed from said header portion; and;
> processing said received header according to said legacy protocol.

However, the specification merely describes the process communicating among heterogeneous systems (see Abstract, page 2 [0004] to page 3 [0007]).

The originally filed specification fails to teach, disclose or suggest the process "wherein said header portion is not truncated when a length of said header portion is not greater than said depth of said memory portion".

In fact, the disclosure indicates the process wherein when the inbound data does not completely fill the memory, the memory is padded with default padding values (See fig. 5 step 502 and step 503).

Hence, the above claimed limitations presents the subject matter situations and was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-5, 11-17, 20-22 are rejected under 35 U.S.C. 112, first paragraph, for the same reasons as set forth in specification above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 11-14, 15, 16, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denny et al. (hereinafter Denny, US 5,544,325) in view of Birdwell et al. (U.S. Patent No. 6,032,197).

As per claim 11, Denny discloses a stateless protocol method comprising:

establish a legacy protocol, wherein said legacy protocol defines at least one legacy parameter for a header portion of a message (read as fragment field or any other field associated with the header), and wherein said legacy protocol defines a fixed legacy header length (fig. 3 and fig. 4: indicates the communication between the sender and receiver utilizing the communication protocol);

receiving and inbound message having a header portion (fig. 4 item #62);

allocating a memory portion from the computer memory, said memory portion having a depth corresponding to said fixed legacy header length (col. 2 L25-60, col. 3 L15-23);

pushing said header portion of said inbound message onto said memory portion thereby forming a received header (fig. 4 item #72, 74), wherein said pushing said header portion comprises retaining the unrecognized fields associated with the header portion (i.e. parameters associated with the upgraded protocol system, fig. 4 item #76, 80);

dynamically allocating the memory space or stack if a length of said header portion is greater than said depth of said memory space corresponding to fixed legacy header length (fig. 4 item #70) and wherein said header portion is not truncated when a length of said header portion is not greater than said depth of said memory portion (fig. 3 item #54, 57);

interpreting said received header according to said legacy protocol (fig. 4 and col. 7 L6 to col. 8 L45);

constructing a legacy header according to said legacy protocol (fig. 3 item #52; fig. 4 item #82);

appending said legacy header to outbound data thereby creating an outbound message (fig. 3 item #52; fig. 4 item #82); and

sending said outbound message (fig. 3 item #61; fig. 4 item #82, 84, 88).

However, Denny does not disclose the process of wherein said header portion is truncated to form the received header if a length of said header portion is greater than said depth of said memory portion corresponding to said fixed legacy header length, such truncation causing any header parameters associated with an upgraded protocol to be removed from said header portion.

Birdwell, from the same field of endeavor discloses the process of truncating and/or compressing the header portion of a packet to form a received header such truncation causing any header parameters associated with the protocol to be removed from header portion (col. 2 L48-60, col. 5 L20-41).

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify Denny in view of Birdwell in order to compress or truncate the

extra or upgraded parameters associated with the upgraded protocol, such truncation causing any extra parameters to be removed from the header portion.

One of ordinary skilled in the art would have been motivated because it would have ensured compatibility, i.e. interoperability, of transaction processing for all computer systems having same or different version of the communication protocol (Denny, col. 1 L44 to col. 2 L2).

As per claim 12, Denny discloses the process as in claim 11 further comprising establishing said upgraded protocol, wherein said upgraded protocol includes said at least one legacy parameter of said legacy protocol, wherein said upgraded protocol defines at least one upgraded header parameter, and wherein said upgraded protocol defines a fixed upgraded header length (fig. 2 and col. 5 L19 to col. 6 L45); wherein said memory portion has depth corresponding to said upgraded header length (fig. 4), wherein said received header of said inbound message is interpreted according to said upgraded protocol if at least one upgraded header parameter is pushed on the memory stack (fig. 4); wherein said received header of inbound message is interpreted according to said legacy protocol if no upgraded header parameters are pushed on the memory stack; constructing an upgraded header according to said upgraded protocol; and appending said upgraded header to outbound data (fig. 4).

As per claim 13, Denny discloses the process further comprising pushing legacy parameters onto said portion before said upgraded parameter is pushed onto said memory portion (fig. 4 item 72 and item #80).

As per claim 14, Denny discloses the process further comprising receiving inbound message from an upper layer application having a header portion in an upper layer format and sending said outbound message to a lower layer application (fig. 3 and fig. 4).

As per claim 4, Denny discloses the process wherein legacy parameter comprises a value-type pair (col. 5 L25 to col. 6 L38 and fig. 2).

As per claim 5, Denny discloses the process wherein said inbound message includes data portion and wherein said header portion is pushed onto said memory after said data portion (fig. 4).

As per claims 1, 2, 15, 16, 20-22, they do not teach or further define over the limitations in claims 11-14, 4, and 5. Therefore claims 1, 2, 15, 1, 20-22 are rejected for the same reasons as set forth in claims 11-14, 4 and 5.

3. Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denny et al. (hereinafter Denny, US 5,544,325) in view of Birdwell et al. (U.S. Patent No. 6,032,197) and further in view of Taylor (U.S. Patent No. 5,206,822).

As per claim 3, Denny in view of Birdwell does not disclose the process of padding said memory portion with default padding values when said header portion of said inbound message does not fill said memory portion.

Taylor explicitly discloses method and apparatus for optimized processing of sparse matrices. Taylor further teaches a storage scheme where the memory is padded with zeros (read as default padding) (col. 3 L34-55).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Denny in view of Birdwell and further in view of Taylor in order to pad the memory with default values.

One of ordinary skilled in the art would have been motivated so that an efficient storage scheme is achieved and where there is structured data access (Taylor, col. 6 L49-58).

As per claim 17, it does not teach or further define over the limitations in claim 3. Therefore claim 17 is rejected for the same reasons as set forth in claim 3.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Muller et al., US 6,453,360 B1: High Performance Network Interface.

b. Ahlers et al., US 6,085,203: Converting data formats which differ from one another.

c. Pathakis et al., US 5,946,467: Application-level, persistent packeting apparatus.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action (i.e. 35 U.S.C. 112, first paragraph). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kamal Divecha
Art Unit 2151
January 30, 2007.

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